

Lake-level change history based on sand content of drilled core during the last 60ka in Lake Biwa

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We here discuss the lake-level change history of Lake Biwa based on sand content of drilled core taken off the river's mouth of Echi. Drilled station located off north east of river's mouth of Echi, water depth is about 23.45m and the length of this sample is 20.5m. Subsamples were cut as 1cm in length and the sand content was measured by sieving method excluding contaminated sediments. Based on the age of widely spreading tephras and ¹⁴C ages of plant fragments we made an Age-model of the sediment. Lake-level change was estimated by the transfer function of sand content to water depth by Terada et al. Comparison of Total Organic Carbon (TOC) content profile at the central part of the lake and the sand content profile show that the lake-level was higher in cold stages before 15ka, and that higher in warmer stages after 15ka. The cause of this correspondence is still in open question. Zonal shift of the prevailing westerlies caused by global climatic changes might be one of the factors.

Keywords: Lake Biwa, Lake level change, Sand content, Sediment, Climate change